

# Clifton Cameras Product Specification

## DJI Mavic 3 Thermal

### Specifications

#### Aircraft

Weight (with propellers, without accessories):	920 g
Max Takeoff Weight:	1,050 g
Dimensions:	Folded (without propellers): 221×96.3×90.3 mm (L×W×H)
Unfolded (without propellers):	347.5×283×107.7 mm (L×W×H)
Diagonal Distance:	380.1 mm
Max Ascent Speed:	6 m/s (Normal Mode) 8 m/s (Sport Mode)
Max Descent Speed:	15 m/s (Normal Mode)
Max Flight Speed (at sea level, no wind):	Forward: 21 m/s, Side: 20 m/s, Backward: 19 m/s (Sport Mode)  *Maximum speed in Sport mode is 19m/s when operating in EU regions.
Max Wind Speed Resistance:	12 m/s  *Max wind speed resistance during takeoff and landing.
Max Take-off Altitude Above Sea Level:	6000 m (without payload)
Max Flight Time (no wind):	45 mins  *Measured with Mavic 3 Enterprise Series flying at a constant speed of 32.4 kph in a windless environment at sea level until the battery reached 0%. Data is for reference only. Please pay attention to RTH reminders in the DJI Pilot 2 app during flight.
Max Hover Time (no wind):	38 mins
Max Flight Distance:	32 km
Max Tilt Angle:	30° (Normal Mode) 35° (Sport Mode)
Max Angular Velocity:	200°/s



GNSS:	GPS+Galileo+BeiDou+GLONASS (GLONASS is supported only when the RTK module is enabled)
Hovering Accuracy:	Vertical: $\pm 0.1$ m (with Vision System); $\pm 0.5$ m (with GNSS); $\pm 0.1$ m (with RTK); Horizontal: $\pm 0.3$ m (with Vision System); $\pm 0.5$ m (with High-Precision Positioning System); $\pm 0.1$ m (with RTK)
Operating Temperature Range:	-10° to 40° C (14° to 104° F)
Internal Storage:	N/A
Motor Model:	2008
Propeller Model:	9453F Propellers for Enterprise
Beacon:	Built into the aircraft
<b>Wide Camera</b>	
Sensor:	1/2-inch CMOS, Effective pixels: 48 MP
Lens:	FOV: 84° Format Equivalent: 24 mm Aperture: f/2.8 Focus: 1 m to $\infty$
ISO Range:	100-25600
Shutter Speed:	Electronic Shutter: 8-1/8000 s
Max Image Size:	8000 x 6000
Still Photography Modes:	Single: 12 MP/48 MP Timed: 12 MP/48 MP JPEG: 2/3/5/7/10/15/20/30/60 s* Panorama: 12 MP (raw image); 100 MP (stitched image) Smart Low-light Shooting: 12 MP * Shooting 48MP photo does not support 2s interval
Video Resolution:	H.264 4K: 3840x2160@30fps FHD: 1920x1080@30fps
Bitrate:	4K: 85 Mbps



	FHD: 30 Mbps
Supported File Formats:	exFAT
Photo Format:	JPEG
Video Format:	MP4 (MPEG-4 AVC/H.264)
<b>Tele Camera</b>	
Sensor:	1/2-inch CMOS, Effective pixels: 12 MP
Lens:	FOV: 15°
Format Equivalent:	162 mm
Aperture:	f/4.4
Focus:	3 m to ∞
ISO Range:	100-25600
Shutter Speed:	Electronic Shutter: 8-1/8000 s
Max Image Size:	4000 x 3000
Photo Format:	JPEG
Video Format:	MP4 (MPEG-4 AVC/H.264)
Still Photography Modes:	Single: 12 MP Timed: 12 MP JPEG: 2/3/5/7/10/15/20/30/60 s Smart Low-light Shooting: 12 MP
Video Resolution:	H.264 4K: 3840x2160@30fps FHD: 1920x1080@30fps
Bitrate:	4K: 85 Mbps FHD: 30 Mbps
Digital Zoom:	8x (56x hybrid zoom)
<b>Thermal Camera</b>	
Thermal Imager:	Uncooled VOx Microbolometer
Pixel Pitch:	12 μm
Frame Rate:	30Hz



Lens:	DFOV: 61°
Format Equivalent:	40 mm
Aperture:	f/1.0
Focus:	5 m to ∞
Sensitivity:	≤50 mk@F1.1
Temperature Measurement Method:	Spot Meter, Area Measurement
Temperature Measurement Range:	-20° to 150° C (-4° to 302° F, High Gain Mode) 0° to 500° C (32° to 932° F, Low Gain Mode)
Palette:	White Hot/Black Ho/Tint/Iron Red/Hot Iron/Arctic/Medical/Fulgurite/Rainbow 1/Rainbow 2
Photo Format:	JPEG (8-bit) R-JPEG (16-bit)
Video Resolution:	640 x 512@30fps
Bitrate:	6 Mbps
Video Format:	MP4 (MPEG-4 AVC/H.264)
Still Photography Modes:	DJI Mavic 3T: Single: 640x512 Timed: 640x512 JPEG: 2/3/5/7/10/15/20/30/60 s
Infrared Wavelength:	8-14 μm
Infrared Temperature Measurement Accuracy:	±2° C or ±2% (using the larger value)
<b>Gimbal</b>	
Stabilisation:	3-axis (tilt, roll, pan)
Mechanical Range:	Tilt: -135° to 45° Roll: -45° to 45° Pan: -27° to 27°
Controllable Range:	Tilt: -90° to 35° Pan: Not controllable
Max Control Speed (tilt):	100°/s
Angular Vibration Range:	±0.007°